

## Kalamazoo River Cleanup Coalition

*"We do not inherit our environment from our Ancestors, but borrow it from our Children."*

June 22, 2015

Environmental Protection Agency (EPA), Region 5, Superfund Division

RE: Follow Up and Outstanding Questions for Cleanup of the Former Allied Paper Superfund Site

Dear Project Manager Berkoff,

Thank you for your attention to some of the questions we developed concerning any "waste in place" option as discussed at and included in the Frequently Asked Questions document distributed at the EPA public presentation in Kalamazoo on April 30<sup>th</sup> 2015. Please see the EPA FAQ sheet and our original letter and questions appended to this document.

Since we recognize that the information provided in response to our concerns thus far is only the EPA's first attempt to answer our questions, we wanted to provide a follow-up in light of those responses to provide further clarity on the types of answers and responses we expect to secure.

Essentially, while some of our questions were addressed, the EPA responses to date lack the level of depth and specificity necessary to qualify as complete answers. For example, three main themes permeated the public discussion and the FAQ: 1) there would be regular monitoring, 2) the site and ongoing maintenance costs will remain the EPA's responsibility, and 3) the risk assessment for all options meet the protective standard. Further elucidation of the 'monitoring' response should include a step by step plan showing exactly how, when, where, and with what purpose monitoring actions will be implemented including the actionable responses should monitoring indicate a problem. Further information concerning the "EPA's responsibility" response should include whether this means the site would ever be de-listed, if some portion of it was de-listed whether the EPA would still be responsible for that portion, and whether the costs of the ongoing monitoring (whether directly on the 'waste in place' or from wells located on adjacent potentially de-listed land) would be borne by the EPA. Additionally, on this point, the costs of the long term monitoring estimated at "5 million" remain unspecified. Finally, we expect the clarity of the risk assessment for any 'waste in place' option to be more fully specified and we expect the remedy to be shown to be protective.

Specifically, concerning the protective standard, there are three unsupported and problematic assumptions that we expect the EPA to address in full. These are: 1) that the materials would bind contaminants keeping them from entering the groundwater, 2) that redistributing the contaminated materials at the site would keep contaminants from entering the groundwater, and 3) any future contaminated water would move toward Portage Creek. The well data appears to show that contaminants did enter the groundwater with some contaminated water moving to the surface and there is currently no definitive model presented to assure that over the decades to come, contaminated water will not continue to move to Portage Creek, local wells, or the aquifer. Likewise, the EPA's current presumption that any contaminated water would move toward Portage Creek is no remedy, but yet another source of risk that has not been explicitly addressed.

The inadequacy of the answer to our questions about comparable sites to Allied is perhaps most easily addressed. While we understand that the Allied Site has particular peculiarities, these differences and characteristics should be denoted and appropriate sites that are more comparable should be used as references to show the long-term monitoring and outcomes we could expect for Allied. For example, while it remains true that the ‘waste in place’ options for Allied would never meet the requirements of a new TSCA approved landfill, those requirements and distinctions, including geography, should be explained in detail. Likewise, while the King Highway, 12<sup>th</sup> Street, and Willow Boulevard/A-Site Landfills given as examples in the FAQ sheet are proximate, they are not constructed over aquifers used for municipal drinking water nor engineered in the specific ways the potential redevelopment option would require. Example sites exhibiting these geographic or engineered characteristics, and ideally that have been in operation for some time, would be the most useful and instructive to provide our community with reasonable future expectations.

Finally, many of our original questions remain completely unanswered. Please see our original list at the end of this document, but in brief the sections on stakeholder representation and nuisance impact were largely unaddressed along with some portion of the questions in all our other categories including protective standard, long-term monitoring, maintenance, and indemnity, and the context of other Superfund sites.

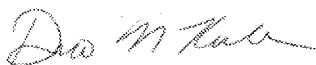
We acknowledge it is likely that many of the answers to our questions, especially those regarding specificity and depth, are already being researched and included in the presumably forthcoming amended Feasibility Study for cleanup of the former Allied Paper Superfund site in Kalamazoo. We look forward to the formal release of that document, the upcoming public meeting announced for June 24<sup>th</sup> 2015, and continuing to participate in the long-term public involvement component of the Superfund process.

Thank you for your attention to this matter.

Sincerely,



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# Frequently asked questions

## Allied Paper Landfill, Operable Unit 1 of the Kalamazoo River Superfund Project

April 2015

### ***Summary of community questions***

The Allied Paper Landfill is part of the Allied Paper/Portage Creek/Kalamazoo River Superfund site. The U.S. Environmental Protection Agency has held meetings recently to discuss possible cleanup options. Here are some of the questions – and the answers – asked at those meetings. This FAQ will be updated as needed.

### ***Does the contamination at Allied Landfill affect Kalamazoo drinking water wells?***

No. EPA studied the groundwater and the flow patterns and found that the groundwater is not flowing toward the city well fields. Also, we have not detected PCBs in the groundwater at levels that pose a risk to human health.

### ***How has EPA cleaned up places similar to Allied Landfill?***

We have used consolidation, capping and monitoring as a cleanup method at King Highway Landfill, 12th Street Landfill and the Willow Boulevard/A-Site Landfill. Each of these sites are PCB-contaminated paper-waste landfills that are part of the larger Kalamazoo River site. Since cleanup was done at King Highway Landfill, groundwater monitoring has found PCBs 34 times in 595 samples since January 2003. At 12th Street Landfill, groundwater monitoring has found PCBs 13 times in 224 samples since October 2011. In all these instances, the PCBs detected were at low levels that do not pose a risk to people. We expect Willow Boulevard/A-Site Landfill to have similar results once monitoring is complete. We have used the consolidation, capping and monitoring cleanup method at dozens of landfills in the Midwest.

### ***The consolidation and capping alternatives in the Allied Landfill Feasibility Study do not include a bottom liner. Is it legal for a Toxic Substances Control Act landfill to not have a bottom liner? Is a landfill without a bottom liner safe?***

Neither TSCA – the federal law that regulates PCBs and other toxic substances – nor its implementing regulations require landfills to have a bottom liner. The purpose of a bottom liner is to prevent waste from leaching into and contaminating the groundwater beneath a landfill. PCBs bond tightly to landfill materials and groundwater does not easily flow through, so it is unlikely the waste will contaminate the groundwater. The consolidation, capping and monitoring cleanup method calls for a multi-layer engineered cap over the waste to prevent rain water from flowing through. As a result, a bottom liner is not necessary.

### ***What are PCBs? • • •***

Polychlorinated biphenyls, or PCBs, belong to a broad family of man-made organic chemicals known as chlorinated hydrocarbons. PCBs were domestically manufactured from 1929 until their manufacture was banned in 1979. Although no longer commercially produced in the United States, PCBs may be present in products and materials produced before the 1979 PCB ban. Once in the environment, PCBs do not readily break down and may remain for long periods of time in air, water and soil.

PCBs have been demonstrated to cause cancer, as well as other adverse health effects on the immune system, reproductive system, nervous system, and endocrine system.

***Will groundwater be prevented from contacting the bottom of the landfill so there will be no treatment costs?***

We don't expect groundwater treatment will be needed because of the paper waste that makes up most of what's in the landfill. That material is roughly as porous as clay, so the groundwater doesn't flow through it easily. In addition, PCBs tend to bond with organic material, like the paper waste in the landfill, so they don't readily dissolve in water. We rarely find PCBs in groundwater at Allied Landfill. When we do, they are at low levels that do not pose a risk to people. Therefore, it is not necessary to prevent contact between the bottom of the landfill and the groundwater.

***Could the cost of a remedy at Allied Landfill affect available funds for the river?***

If the landfill cleanup costs more than the amount set aside for it in the trust, EPA might draw on site-wide funds that would otherwise be used to clean up the Kalamazoo River.

***Who will make sure that the landfill cleanup protects us long-term?***

It is EPA's responsibility to make sure the cleanup protects people and the environment. If the cleanup includes waste managed on-site, there would be regular monitoring of the landfill cap and groundwater. If there is a site-wide redevelopment, we will take steps to ensure that the cleanup stays effective in perpetuity.

***Are there any alternative technologies that could be used?***

We looked closely at a number of alternative technologies and concluded that none are viable options at Allied Landfill. To learn more, see Section 3 of the Allied Landfill Feasibility Study and a supplemental memorandum, both of which are at [www.epa.gov/region5/cleanup/alliedpaper/index.html](http://www.epa.gov/region5/cleanup/alliedpaper/index.html).

***Would the new redevelopment alternative protect people and the environment?***

Yes. EPA can only select from among cleanup alternatives that are protective.

***What will be the cleanup standards?***

EPA develops cleanup standards based on how the site may be used after cleanup and how people and animals might be exposed to remaining contamination. We will finalize the cleanup standards after we select a final cleanup plan. To learn more, see a discussion of potential cleanup standards in the Allied Landfill Feasibility Study at [www.epa.gov/region5/cleanup/alliedpaper/index.html](http://www.epa.gov/region5/cleanup/alliedpaper/index.html)

***Would the addition of a new redevelopment alternative mean that the total removal alternative would be taken out of the Feasibility Study?***

No. We will keep the total removal alternative in the Feasibility Study, as well as the other options, and consider each before choosing a cleanup option.

***What are the costs associated with a remedy that keeps the waste in place?***

Leaving waste in place requires long-term maintenance to ensure the cleanup continues to protect people and the environment over time. For Allied Landfill, EPA estimates ongoing maintenance of consolidation, capping and long-term monitoring would be \$5 million.

***Would stacking the waste higher cause contaminated water to be squeezed out, sending contamination into the groundwater?***

Piling excavated material onto existing material would compress the underlying materials. During the design phase, we would take samples to determine if we need to add stabilization measures. We would also monitor the groundwater to see if we need to treat the groundwater. In the long term, compression of the materials could make them less porous.

***For more information regarding the Allied Paper Landfill, contact the following:***

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## Kalamazoo River Cleanup Coalition

*"We do not inherit our environment from our Ancestors, but borrow it from our Children."*

April 27, 2015

TO: US Senator Stabenow, US Senator Peters, US Congressman Upton, Governor Snyder, State Senator O'Brien, State Representative Hoadley, Kalamazoo Mayor Hopewell

Dear [Elected Official],

Thank you for your ongoing interest in restoring and maintaining ecological balance in the Kalamazoo River watershed. We at the Kalamazoo River Cleanup Coalition ask for your help in securing answers to questions about the presumably forthcoming amended Feasibility Study for cleanup of the former Allied Paper Superfund site in Kalamazoo. As the Environmental Protection Agency moves closer to a Record of Decision for the Allied site, we seek your commitment to ensure that relevant agencies at the federal, state, and local level will address our ongoing concerns and questions.

As you know, only total removal of all contaminants from the site will best promote ecological restoration, public health improvement, social justice, and economic growth in the Kalamazoo area. However, we understand that the EPA may elect for a "waste in place" option, given the significant financial costs of presented in the complete removal of all contaminants.

If the EPA does not pursue total removal of all contaminants from the site, we have several significant concerns about the future of the site and the surrounding environment. With help from our board, community residents, and subject matter experts, we have developed a list of questions that fall into five broad categories of concern: stakeholder representation in the process of amending the draft Feasibility Study; the protective standard used for choosing among the Feasibility Study options; the long-term monitoring, maintenance, and indemnity of the site; what the EPA's experience of other sites, over the long-term, suggests for the safety of this site; and the impact of the actual cleanup process on the neighboring residential community.

### **Stakeholder Representation**

*Are local stakeholders adequately represented in the ongoing feasibility study? Residents? Neighboring property owners? Elected officials? Scientific community? Public health officials?*

### **Protective Standard**

*If the EPA's elects, in its Record of Decision, one of the "waste-in-place" options, what safeguards will it provide to protect the human health of Kalamazoo City drinking water customers, and area residents? The ecosystem?*

*If the EPA's selected option makes any part of the site available for public use, what level of "clean" is acceptable in those areas of the site?*

*If the EPA's selected option makes any part of the site available for public use, how will public use of the site affect the containment of contaminants at the site?*

*If the EPA's Record of Decision does not include total removal of contaminants, what assurance do we have (if any) that contaminants will not penetrate the upper aquifer under the site? Based upon what scientific evidence? If any contaminant waste is stored at the site for an indefinite period of time, what is the estimated risk of onsite storage compared to "equivalent" storage in a TSCA landfill?*

### **Long-Term Monitoring, Costs, Ownership, and Indemnity**

*Will the EPA fund its preferred option entirely with funds from the bankruptcy trust, or are additional funds necessary?*

*If additional funds are necessary, what sources will EPA pursue?*

*What is the long-term plan for ownership and control of the site once the EPA completes its remedial activities?*

*Who is responsible for long-term monitoring at the site once the EPA completes its remedial activities?*

*What is the estimated cost for long-term monitoring at the site and who will pay?*

*What is the plan for long-term monitoring at the site to ensure that contaminants are contained on site?*

*If and when future adverse human health effects from the contaminants occur or are identified, who is legally responsible for medical costs and damages?*

*After EPA removes the site from the National Priorities List, who will be responsible should stored contamination there migrate to the surface, into the creek, or into the upper aquifer and require further remediation?*

*If any portion of the site is redeveloped and sold to a private owner, will any public agency indemnify the new owner against possible liability stemming from pre-existing contamination?*

### **Context of Other Superfund Sites**

*Are there any Superfund sites in the United State where the EPA left "waste in place" in an area directly above an aquifer used for municipal drinking water?*

*Are there any Superfund sites in the United State where the EPA left "waste in place" in an area where contaminants later migrated out of the intended landfill?*

## Nuisance Impact

*If the EPA selects a “waste in place” option that requires contaminated soil to be piled up, will this create a public eyesore? What characteristics will be visible from the road? From neighboring properties?*

*Whatever option the EPA selects, how will the remediation process disrupt the site? The surrounding area? The entire city? How does this anticipated disruption compare to the anticipated disruption that would result from total removal?*

We, and the citizens of Kalamazoo, need your help in obtaining answers to these questions before the EPA’s cleanup option selection process is too far along for us to provide meaningful input on the possible options for the site. We have been asking these questions for a long time and we can’t wait any longer.

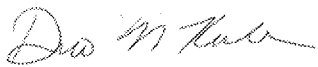
Please contact Gary Wager, KRCC Executive Director, at [glwager@gmail.com](mailto:glwager@gmail.com) at your earliest convenience to confirm your commitment to seeking answers to these issues, or to communicate any questions or concerns that you might have about this request. The Allied Paper Inc./Portage Creek/Kalamazoo River Superfund Site has burdened our community for decades, and as the EPA moves closer to issuing a Record of Decision, we need to stand together to make sure that Kalamazoo’s best interests are fully represented.

Thank you for your attention to this matter.

Sincerely,



Gary Wager  
Executive Director, KRCC



Denise M. Keele  
President of the Board of Directors, KRCC